

**I CLAIM:**

1. An apparatus for producing a pressurized stream of substantially inert gas, the apparatus comprising;
  - 5 (i) a compressor having an intake manifold and an output manifold, said intake manifold receiving a substantially inert gas stream, said output manifold receiving a stream of pressurized gas from said compressor; and,
  - (ii) a compressed gas re-circulation conduit connecting said output manifold to said intake manifold such that a portion of the pressurized gas from said compressor is re-circulated from said output manifold back to said intake manifold to maintain the gas pressure within said intake manifold above atmospheric pressure and to prevent atmospheric gases from being drawn into said intake manifold.
- 15 2. The apparatus as claimed in claim 1 including a valve situated within said gas re-circulation conduit to control the volume and flow of gas therethrough.
3. The apparatus as claimed in claim 2 including a pressure sensor in said intake manifold to monitor the gas pressure therein.

4. The apparatus as claimed in claim 3 wherein said valve is pneumatically, hydraulically or electrically actuated, said apparatus including a microprocessor control that receives a signal from said pressure sensor and automatically adjusts said valve in said gas re-circulation conduit in response to fluctuations in the gas pressure in said intake manifold so as to control the flow of compressed gas to said intake manifold and to maintain the gas pressure therein within a desired range to prevent atmospheric gases from being drawn into said intake manifold.
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- 10 5. The apparatus as claimed in claim 2 wherein said valve is manually actuated.
6. The apparatus as claimed in claim 2 wherein said valve is a spring actuated regulator.
- 15 7. The apparatus as claimed in claim 1 including an internal combustion engine, said internal combustion engine operatively connected to said compressor and utilized to drive said compressor, said intake manifold of said compressor receiving the exhaust stream from said internal combustion engine.
- 20 8. The apparatus as claimed in claim 1 wherein said intake manifold of said compressor is connected to the exhaust manifolds of one or more internal

combustion engines, said stream of substantially inert gas comprising the exhaust from said one or more internal combustion engines.

9. An apparatus for producing a pressurized stream of substantially inert gas, the  
5           apparatus comprising;
- (i) an internal combustion engine;
  - (ii) a compressor, said internal combustion engine operatively connected to  
          said compressor and utilized to drive said compressor, said compressor  
          having an intake manifold and an output manifold, said intake manifold  
10          receiving an exhaust stream from said internal combustion engine, said  
          output manifold receiving a stream of pressurized gas from said  
          compressor; and,
  - (ii) a compressed gas re-circulation conduit connecting said output manifold  
          to said intake manifold such that a portion of the pressurized gas from  
          said compressor is re-circulated from said output manifold back to said  
15          intake manifold to maintain the gas pressure within said intake manifold  
          above atmospheric pressure and to prevent atmospheric gases from being  
          drawn into said intake manifold.